Site Visit Report

Under the *European Union (Drinking Water) Regulations 2023*, the Environmental Protection Agency (EPA) is the supervisory authority in relation to Uisce Éireann and its role in the provision of public drinking water supplies. This audit was carried out to assess the performance of Uisce Éireann in providing clean and wholesome water to the public water supply named below.

The audit process is a sample of the performance of a water treatment plant and public water supply on a given date.

Water Supply Zone

Name of Installation	Glanmire
Organisation	Uisce Éireann
Scheme Code	0500PUB2107
County	Cork
Site Visit Reference No.	SV35042

Report Detail

Issue Date	30/04/2026
Prepared By	David O'Malley

Site Visit Detail

Date Of Inspection	12/03/2026	**Announced**	Yes
Time In	10:30	**Time Out**	13:30
EPA Inspector(s) **Additional Visitors**	David O'Malley Maeve McHugh		
Company Personnel	Uisce Éireann: Claire Hurley, Sharon O'Dwyer, Claire Kelly, Dominic McEvoy, Richard Howlin, Colm O'Leary and M Hassan Shabbir. Cork County Council (working in partnership with Uisce Éireann): Padraig Griffin.		

Summary of Key Findings

1. There were two aluminium exceedances in the Glanmire public water supply on 03/02/2026 and on 02/03/2026.

2. The audit determined that, due to inadequate operational oversight, the protozoal barrier was not properly maintained on 06/02/2026 for approximately three hours. Uisce Éireann did not notify the HSE or the EPA of this incident.

3. The audit identified a further deficiency in operational oversight at the water treatment plant on 02/03/2026, which resulted in a breach of the protozoal barrier for approximately two and a half hours. Final water sampling on the same date recorded an aluminium concentration of 387 µg/L, exceeding the drinking water parametric value of 200 µg/L.

4. The turbidity incidents on 06/02/2026 and on 02/03/2026 were both caused by operator error and were not reported to the HSE or the EPA when they occurred. The failure by Uisce Éireann to report these incidents prevented the HSE in determining the potential risk to consumer health on the Glanmire supply, and also prevented any timely actions to protect consumer health. The audit found that the incidents were not managed or escalated appropriately due to lack of oversight, alarms and appropriate operational management.

Uisce Éireann should submit a report to the EPA on or before 01/06/2026 detailing the actions taken and planned, with timescales, to close out the five recommendations in this audit report.

Introduction

Glanmire Public Water Supply (PWS) produces approximately 2,694 m3/day serving a population of 6,772. The supply is sourced from tributaries of the Butlerstown River and treatment takes place at the Knockraha water treatment plant (WTP). Treatment consists of coagulation, flocculation with rapid gravity filtration (RGF) followed by chlorination and fluoridation.

Supply Zones Areas Inspected

The audit consisted of a review of the incident response to the aluminium and turbidity exceedances.

1. Incident Management

		Answer
1.1	Was the incident suitably alerted to the plant operators, escalated and managed in order to maintain water quality and protect public health?	No

Comment

Incident 1

- On 26/02/2026 the EPA and the HSE were notified of a failure of the aluminium parametric value of 200 ug/l in a sample (result 302 ug/L) taken on 03/02/2026 in the Glanmire PWS. After further investigation Uisce Éireann notified the EPA on the 27/02/2026 of elevated turbidity (> 0.3 NTU) in the RGFs between 23/01/2026 and 20/02/2026 at the WTP.
- Records show that alum dosing increased from 20/01/2026 in response to heavy rain. A streaming current monitor is used to automatically dose alum based on the raw water quality. Alum jar testing is carried out weekly.
- Trend data submitted to the EPA and viewed at the audit displayed that on 01/02/2026 the water treatment plant shutdown on high turbidity in the final water at 15.00 and was restarted at 19:00. The turbidity trends on the 02/02/2026 show that there was high turbidity in RGF 2 with a shutdown at 8:28am. The plant restarted after 15 minutes when the turbidity went below 0.3 NTU. Turbidity levels were also above normal averages in RGF 1, but below 0.3 NTU. Turbidity trends viewed display that the WTP was operating satisfactorily on the day of the aluminium exceedance on 03/02/2026.

Incident 2

- Investigations at the audit and trends viewed showed that on 06/02/2026 operational staff arrived at the water treatment plant at 09:00 and observed that turbidities were above 0.3 NTU across the three RGFs and above 1 NTU in the final water. The WTP had not shutdown on high turbidity. The procedure is to turn off turbidity alarms in the RGFs and run the plant to waste until turbidity stabilises. Operational staff did not close the valve to the reservoir and sent inadequately treated water to the reservoir between approximately 09:00 and 12:00. This incident was not reported to the HSE or the EPA.
- Uisce Éireann notified the HSE on 27/02/2026 of the aluminium exceedance of 302 ug/L and of the recent operational issues at the WTP. Following consultation with the HSE, Uisce Éireann were requested to sample for *Cryptosporidium*, aluminium and turbidity at the WTP and on the network. Samples taken on 02/03/2026 at the WTP and on the network came back clear for *Cryptosporidium.* Turbidity results came back clear at the WTP and on the network. Samples of aluminium taken on the network were below the Drinking Water Regulations 2023 parametric limit of 200 ug/L. Aluminium sample taken of the final water at the WTP came back at 387 ug/L above the parametric limit.

Incident 3

- Turbidity trend data reviewed from 02/03/2026 demonstrated the WTP shutdown at 09:00 on high turbidity in the RFG No.2. The WTP was restarted at approximately 09:30, turbidity trends display that turbidities were above 0.3 NTU in RFG No.1 and No.2 until 12:00. There are no notes in the daybook to describe what happened on the day. This incident was not reported to the HSE or the EPA.
- Resampling for aluminium taken on 12/03/2026 at the WTP and on the network came back below the parametric limit of 200 ug/L.

The audit found the RGFs were not operated correctly at all times which resulted in inadequately treated water entering the network.

The audit found that the incidents were not suitably escalated and managed in order to maintain water quality and protect public health.

Recommendations:

1. Ensure the review and oversight of trends is undertaken on a daily basis and that plant performance issues are escalated immediately.

2. Ensure appropriate oversight of alarm and inhibit responses on an ongoing basis.

3. Establish an SOP when running the water treatment plant to waste when there is high turbidity. This system should have clear steps to ensure that water above 0.3 NTU turbidity does not enter the reservoir. The SOP should include a system for deactivating and reinstating turbidity alarms and shutdowns.

4. Ensure the daily record keeping is maintained so the line manager has full oversight of water treatment plant activities and issues.

5. Ensure there is a documented incident response procedure in place at the plant, and that plant operators and management are fully trained on responding to incidents, to ensure that incidents affecting drinking water quality are suitably escalated and managed in order to maintain water quality and protect public health.

Recommendations

Actions required by Uisce Éireann

During the audit, Uisce Éireann representatives were advised of the audit findings and that action must be taken by Uisce Éireann to address the issues raised.

Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the recommendations raised in this report without delay.

Response to Audit Report

Uisce Éireann should submit a report to the EPA on or before the date specified in the Summary of Key Findings detailing the actions taken and planned, with timescales, to close out the recommendations in this audit report.

The EPA advises that the findings and recommendations from this report should, where relevant, be addressed at other public water supplies.

Publication of Reports

Audit reports are published to the EPA's website, www.epa.ie, typically 1 month after the audit report is issued to Uisce Éireann.